

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-8 Canceled.

9. (New) An ultrasonic standing-wave atomizer arrangement for producing a paint spray mist for painting a workpiece, with a sonotrode, with a component arranged lying opposite the sonotrode, a standing ultrasonic field being formed in the intermediate space between the at least one sonotrode and the component in the case of operation, and also with at least one nozzle-shaped paint feeding device, which is arranged perpendicularly in relation to the center axis of the sonotrode and introduces the paint into the intermediate space for the atomizing process at at least one paint discharge point, wherein the component arranged lying opposite the sonotrode is a coaxially aligned reflector, wherein the end face of the latter, facing the sonotrode, has a step-shaped recessed formation and wherein the depth of the recessed formation corresponds to a multiple of half the wavelength λ of the sonic vibrations in air that are produced in the sonotrode.
10. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 9, wherein the reflector is formed as a passive reflector.

11. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 10, wherein the reflector is formed as a circular disk-shaped plate or as a rectangular plate.
12. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 11, wherein the thickness of the reflector likewise corresponds to a multiple of half the wavelength of the sonic vibrations produced in the sonotrode.
13. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 5, wherein the thickness of the reflector is at least 10 mm.
14. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 9, wherein the step-shaped recessed formation in the reflector is formed in the latter below the horizontal center axis of the reflector.
15. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 14, wherein the step-shaped recessed formation in the reflector is formed in the end face of the reflector lying opposite the sonotrode in the form of a semicircle.
16. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 14, wherein the stepped-shaped recessed formation in the reflector is formed in the end face of the reflector lying opposite the sonotrode in the manner of a sector, with an opening widening symmetrically in the spraying direction.

17. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 16, wherein the sector-like stepped-shaped recessed formation in the end face of the reflector has an angle of opening α of $45^\circ < \alpha < 180^\circ$.
18. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 17, wherein the sector-like step-shaped recessed formation in the end face of the reflector has an angle of opening α of 135° .
19. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 12, wherein the thickness of the reflector is at least 10 mm.
20. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 10, wherein the step-shaped recessed formation in the reflector is formed in the latter below the horizontal center axis of the reflector.
21. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 11, wherein the step-shaped recessed formation in the reflector is formed in the latter below the horizontal center axis of the reflector.
22. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 12, wherein the step-shaped recessed formation in the reflector is formed in the latter below the horizontal center axis of the reflector.

23. (New) The ultrasonic standing-wave atomizer arrangement as claimed in claim 13, wherein the step-shaped recessed formation in the reflector is formed in the latter below the horizontal center axis of the reflector.